AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior listings of claims in the application.

LISTING OF CLAIMS

1. *(Currently Amended)* A memory function body comprising:

a first conductor and a second conductor;

a medium that is formed between the first conductor and the second conductor and made of a first material; ~~and~~

at least one particle that is formed in the medium ~~, covered with a second material,~~ and made of a third material[[,]]; and

a cover, formed within the medium, that covers the at least one particle and is made of a second material, wherein

the second material being a material that functions as a barrier against passage of electric charges, and

the third material being a material that has a function to retain electric charges.

2. *(Original)* The memory function body as claimed in claim 1, wherein the first material and the second material are different insulators, and the third material is a conductor.

3. *(Original)* The memory function body as claimed in claim 2, wherein the second material is a material obtained by making the third material insulative.

4. *(Original)* The memory function body as claimed in claim 3, wherein the second material is a material obtained by oxidizing or nitriding the third material.

5. *(Original)* The memory function body as claimed in claim 1, wherein the first material is a silicon oxide or a silicon nitride, the second material is a semiconductor oxide or a metal oxide, and the third material is a semiconductor or a metal.

6. *(Original)* The memory function body as claimed in claim 4, wherein the second material is aluminum oxide, and the third material is aluminum.

7. *(Original)* The memory function body as claimed in claim 5, wherein the second material is aluminum oxide, and the third material is aluminum.

8. *(Original)* The memory function body as claimed in claim 1, wherein the first conductor is a silicon substrate, and the medium is a silicon oxide or a silicon nitride.

9. *(Withdrawn)* A particle forming method, comprising:

implanting a substance for forming one or more particles into an insulator by an ion implantation method;

forming conductive particles from the substance implanted in the insulator; and

making the conductive particles insulative at a periphery thereof.

10. *(Withdrawn)* The particle forming method as claimed in claim 9, wherein the substance for forming conductive particles is implanted into the insulator from a direction that makes an acute angle with respect to a surface of the insulator.

11. *(Withdrawn)* The particle forming method as claimed in claim 9, comprising ionizing the substance to be implanted into the insulator for forming the conductive particles into negative ions.

12. *(Withdrawn)* The particle forming method as claimed in claim 9, wherein after implanting the substance for forming one or more conductive particles into the insulator by the ion implantation method, the particle forming method further comprises:

etching the insulator from a top surface to a prescribed depth.

13. *(Withdrawn)* The particle forming method as claimed in claim 9, wherein said forming conductive particles from the substance implanted in the insulator comprises performing a heat treatment for a time shorter than 24 hours.

14. *(Withdrawn)* The particle forming method as claimed in claim 9, wherein said making the conductive particles insulative at a periphery thereof comprises oxidizing or nitriding the periphery of each conductive particle.

15. *(Withdrawn)* A particle forming method, comprising:

diffusing a substance for forming one or more conductive particles into an insulator by a solid phase diffusion method;

forming conductive particles from the substance diffused in the insulator; and

making the conductive particles insulative at a periphery thereof.

16. *(Withdrawn)* The particle forming method as claimed in claim 15, wherein said making the conductive particles insulative at a periphery thereof comprises oxidizing or nitriding the periphery of each conductive particle.

17. *(Withdrawn)* The particle forming method as claimed in claim 15, wherein said forming conductive particles from the substance implanted in the insulator comprises performing a heat treatment for a time shorter than 24 hours.

18. *(Withdrawn)* A particle forming method, comprising:

forming an insulator on a semiconductor substrate;

implanting a substance that contains a conductive element into the insulator by a negative ion implantation method; and

subjecting the insulator, in which said substance has been implanted, to heat treatment in an oxidizing atmosphere or a nitriding atmosphere.

19. *(Withdrawn)* The particle forming method as claimed in claim 18, wherein said implanting a substance that contains a conductive element into the insulator

comprises implanting the substance from a direction that makes an acute angle with respect to a surface of the insulator.

20. *(Withdrawn)* The particle forming method as claimed in claim 18, wherein the heat treatment in the oxidizing atmosphere or the nitriding atmosphere is performed for a time shorter than 24 hours.

21. (*Currently Amended)* A memory device including a field-effect type transistor that employs ~~the~~ a memory function body comprising:

a first conductor and a second conductor;

a medium that is formed between the first conductor and the second conductor and made of a first material; ~~and~~

at least one particle that is formed in the medium and made of a third material[[,]]; and

a cover, formed within the medium, that covers the at least one particle and is made of second material, wherein

the second material being a material that functions as a barrier against passage of electric charges, and

the third material being a material that has a function to retain electric charges.

22. (*Currently Amended)* A semiconductor device including a memory circuit having memory devices therein, each of which includes a field-effect type transistor that employs a memory function body comprising:

a first conductor and a second conductor;

a medium that is formed between the first conductor and the second conductor and made of a first material; ~~and~~

at least one particle that is formed in the medium~~, covered with a second material,~~ and made of a third material[[,]]; and

a cover, formed within the medium, that covers the at least one particle and is made of a second material, wherein

the second material being a material that functions as a barrier against passage of electric charges, and

the third material being a material that has a function to retain electric charges.

23. (*Currently Amended)* Electronic equipment including a semiconductor device including a memory circuit having memory devices therein, each of which includes a field-effect type transistor that employs a memory function body comprising:

a first conductor and a second conductor;

a medium that is formed between the first conductor and the second conductor and made of a first material; ~~and~~

at least one particle that is formed in the medium~~, covered with a second material,~~ and made of a third material[[,]]; and

a cover, formed within the medium, that covers the at least one particle and is made of a second material, wherein

the second material being a material that functions as a barrier against passage of electric charges, and

the third material being a material that has a function to retain electric charges.

24. (New) The memory function body as claimed in claim 1, wherein the third material comprises at least one element selected from the group consisting of aluminum, tungsten, niobium, zirconium, titanium, chromium, tin, cobalt, nickel, iron, antimony, lead, silver, gold, copper, nickel, platinum, zinc, hafnium, manganese, tantalum, indium, and germanium.

25. (New) The memory function body as claimed in claim 1, wherein the second material is silver oxide and the third material is silver.

26. (New) The memory function body as claimed in claim 1, wherein the second material is silicon nitride and the third material is silicon.

27. (New) The memory function body as claimed in claim 1, wherein the medium has a thickness of less than 70 nm.

28. (New) The memory function body as claimed in claim 1, wherein said particle has a diameter within a range of larger than 0.1 nm and smaller than 4nm.

29. (New) The memory function body as claimed in claim 1, wherein the first, second, and third materials are different materials.

30. (New) A dynamic random access memory having a capacitor, said capacitor comprising the memory function body as claimed in claim 1.

31. (New) The memory function body as claimed in claim 1, wherein a boundary is formed between an outer surface of the cover and the medium.

32. (New) The memory function body as claimed in claim 1, wherein said cover functions as a barrier to prevent electric charges from passing to the medium.